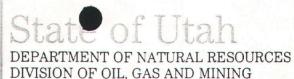


Dianne R. Nielson, Ph.D.



355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 Division Director 801-538-5340



October 24, 1990

Mr. Roy Benson B M & T - Geneva Steel Division Manager C/O Keigley Quarry Box 20-B, RFD #1 Santaquin, Utah 84655

Dear Mr. Benson:

Review of Large Mine Operation Permit Revision, B M & T -Geneva Steel, Iron Mountain Mine, M/021/008, Iron County, Utah

The Division has completed its review of your latest application for a permit revision to Geneva Steel's, Iron Mountain Mine, mining and reclamation plan. Please accept our apology for the unforeseen delay in processing your revision application.

Geneva Steel has submitted a revision request in the form of three documents: 1) a Notice of Intent to Commence Large Mining Operations referring to the Iron Mountain Mine and including the Chesapeak/Excellsior area, the Burke area, and Tip Top area; 2) a Notice of Intention to Revise Mining Operations covering the Chesapeak/Excellsior Small Mining Permit and including the Tip Top area; and 3) a Narrative describing the Iron Mountain area, the Burke Stockpile, Loadout and Pit areas, the Chesapeak/Excellsior area, and the Tip Top area. As suggested by the Division, the operator wishes to combine all the company's mining operations in this area into one permit.

Upon review of your permit revision application, we have identified the following technical questions and concerns which must be addressed:

## R613-004-105. Maps, Drawings and Photographs

The operator needs to provide a surface facilities map(s) which includes, but is not limited to, buildings, stationary mining/processing equipment, roads, utilities, power lines,

Page 2 Mr. Roy Benson M/021/008 October 24, 1990 existing and proposed drainage control structures, topsoil and/or substitute topsoil material storage areas, tailings or waste facilities, disposal areas for overburden, solid and liquid wastes and waste water discharge treatment and containment facilities. The map(s) should include a border clearly outlining the acreage disturbed or proposed to be disturbed by mining operations. Due to the large extent of the area involved by combining all of the operations together, the operator may wish to submit several maps of a scale of 1" = 500' which fit together or a larger scale map (1" = 1000') showing the entire operation with references to detail maps of smaller areas. Due to the large area involved and number of scattered facilities, the following items should be shown on additional maps: Regraded slopes to be left at steeper than 2h:1v; 2) Plans, profiles and cross sections of pits and waste dumps, and roads, pads, or other earthen structures to be left as part of the post-mining land use; Water impounding structures with embankments greater 3) than 20 ft in height or greater than 20 acre feet in storage capacity; Surface areas which will be disturbed by the operator but will not be reclaimed, such as solid rock slopes, cuts, roads, pits, dumps, or sites of buildings or surface facilities to be left as part of the postmining land use; Pre-law disturbances which have and have not been disturbed by the operator, including any areas which will be redisturbed; A reclamation activities and treatment map to identify the location and the extent of the reclamation work to be accomplished by the operator upon cessation of mining operations. (These drawings shall be utilized to determine adequate bonding and reclamation practices for the site);

Page 3 Mr. Roy Benson M/021/008 October 24, 1990 7) Disturbed area already permitted and covered by a reclamation surety versus areas which are not yet permitted and bonded. These maps must represent all areas to be included in the amended mine notice. An overall small scale map should be submitted along with a series of larger scale maps designating specifics for separate sites or combination of sites. R613-004-106. Operation Plan The operator needs to provide the following information: Identify any deleterious or acid-forming materials present or to be left on the site as a result of mining or mining processing. The operator must identify areas where waste materials are being generated. These materials need to be described by the operator, including analyses for acid producing qualities or alkaline wastes (acid-base analysis and SAR). Other analyses may be required by the Division if these analyses prove to be positive; or may be required depending upon the origin of wastes generated; 2) An estimate of the acreage proposed to be disturbed and/or reclaimed annually or sequentially; A description of the nature of the materials to be mined or processed including waste/overburden materials and the estimated annual tonnages of ore and waste materials to be mined; 4) Proposed location and size of ore and waste stockpiles, tailings facilities and water storage/treatment ponds; 5) The Division needs to be informed of any potentially dangerous processing chemicals which may be utilized by the operator on site; The Division will require that the operator describe the soils in areas to be disturbed. This is necessary to evaluate the salvageability potential of mine site soils.

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If well developed topsoil does not exist in the area, other materials can be successfully substituted. Such material might include: overburden, spoils, sediments from ponds, borrow material, or poorly developed B or C horizon soils.

## Note:

If no topsoil or substitute material exists to use as a planting medium, the operator must describe the site conditions creating the deficiency to obtain a variance. The Division may require the operator to be a means of alleviating the deficiency;

- The operator must develop and describe a plan for the salvaging and redistribution of topsoil or substitute soil material on all areas to be disturbed on site. Areas which were disturbed pre-law are exempt from topsoil salvage. However, it will be necessary to develop alternative methods to construct viable plant growing mediums in these areas, i.e. the use of substitute material and soil amendments, such as mulches and fertilizer. Also, site specific plant seed mixtures should be developed for sites;
- 8) The operator has requested Division assistance in developing a description of the existing plant communities associated with the site. Unfortunately, the Division is not sufficiently staffed to accommodate this request. The operator will have to acquire other assistance in this regard;
- 9) The depth to groundwater below the area to be disturbed;
- 10) The operator will need to provide descriptions and locations for all: waste stockpiles, tailing facilities and water storage or treatment (sediment ponds) found or to be constructed on site.

## R613-004-107. Operation Practices

The operator needs to conform to the practices outlined in this section of the rules regarding public safety and welfare, unless granted a variance from the Division in writing, specifically: Page 5 Mr. Roy Benson M/021/008 October 24, 1990 The disposal of trash, scrap metal, wood, and 1) extraneous debris; 2) The posting of appropriate warning signs in locations where public access to operations is readily available; The construction of berms, fences and/or barriers above 3) highwalls or other excavations; If natural channels are to be affected by the mining 4) operation, then the operator shall take appropriate measures to avoid or minimize environmental damage; A description of the type of erosion control techniques to be implemented on site. The operator needs to evaluate areas where erosion may become a problem and take proper measures to prevent erosion. Erosion control measures might include: silt fencing of drainages; straw bale or check dam placement in drainages and/or ditches; construction of on site or off site drainage channels; contemporaneous reclamation; settling basin and/or sediment pond construction, etc.; Concurrent or contemporaneous reclamation should be 6) considered by the operator in this mining and reclamation plan (Notice of Intent). Areas no longer required by the operator for mining should be reclaimed in a timely fashion. Such reclamation will help to reduce a bond or limit its increase as the operation expands. R613-004-109. Impact Assessment The operator needs to provide a general narrative description identifying potential surface and/or subsurface mining-related impacts on surface and groundwater systems, slope stability, erosion control, air quality, and public health and safety, etc. The narrative must also include any mitigative actions proposed to address any identified impacts. Questions to consider may include: What will be the impacts of mining on slope stabilities? Are there now or will there be any unstable slopes upon termination of mining activities? What are, or will be, the location and extent of these problem slopes? If slopes are to be left at angles Page 6 Mr. Roy Benson M/021/008 October 24, 1990 greater than 3H:1V, what mitigative steps will the operator take to prevent erosion and assure attainment of the revegetation standards? What short-term and long-term surface and ground water impacts may be expected as a result of mining activities? What measures will be utilized by the operator to protect or insure that public health and safety concerns are addressed during and after mining operations? R613-004-110. Reclamation Plan The operator must provide a detailed reclamation plan. plan must include a narrative description of the proposed reclamation and provide reference to any supportive maps or drawings. The narrative should include, but not be limited to: 1) A description of the manner and extent to which roads, highwalls, slopes, impoundments, drainages, pits, ponds, piles, shafts, adits, drill holes, and similar structures will be reclaimed; 2) A detailed description of any surface facilities to be left as part of the post-mining land use, including but not limited to, buildings, utilities, roads, pads, ponds, pits and surface equipment; A description of the treatment, location and disposition of any deleterious or acid-forming materials generated and left onsite, including a map showing the location of such materials upon the completion of reclamation; 4) What are the proposed postmining landuses for the various areas covered by this permit? What type of planting programs will be applied to 5) various areas of this site? Because of the number of different areas to be included in this plan, different planting programs will be needed. Redisturbed pre-law sites will require a different seed mix and different soils amendments than native, undisturbed sites, or from sites disturbed more recently by the operator. What grading and stabilization procedures will be used upon final reclamation? Will topsoil, substitute plant growth material or no material be applied? What seed mixtures and rates will be applied on the various sites?

Page 7 Mr. Roy Benson M/021/008 October 24, 1990 R613-004-111. Reclamation Practices During reclamation, the operator shall conform to the practices regarding public safety and welfare listed under this rule unless the Division grants a variance in writing. Some of these practices have been outlined above in Rule R613-004-107, Operation Practices. More specifically: If natural channels have been affected by mining operations, then reclamation must be performed such that the channels will be left in a stable condition with respect to actual and reasonably expected water flow so as to avoid or minimize future damage to the hydrologic system; Reclamation shall be conducted in a manner such that 2) sediment from disturbed areas is adequately controlled; 3) Waste piles, spoil piles and fills shall be regraded to a stable configuration and shall be sloped to minimize safety hazards and erosion while providing for successful revegetation; 4) Highwalls shall be reclaimed and stabilized by backfilling against them or by cutting the wall back to achieve a slope angle of 45 degrees or less; Onsite roads and pads shall be reclaimed unless they 5) are to remain as part of the post-mining land use, in which case they must include adequate surface drainage structures and be left in a condition suitable for continued use; Structures, rail lines, utility connections, equipment 6) and debris shall be buried or removed; If deleterious materials (spoils, wastes, tailings) are 7) generated on site, how will these be neutralized? 8) How will the pits or trenches generated from mining be reclaimed? If they are not to be reclaimed, the operator must explain why and a variance; 9) The reclamtion plan must indicate that pure live seed will be used. Also, the seed must be certified and tagged by the distributor. The operator must verify certification at the time of reclamation.

Page 8 Mr. Roy Benson M/021/008 October 24, 1990 R613-004-112. Variance The operator has requested variances for pit walls and topsoil requirements. In order to grant these variances the following information must be provided by the operator: The variance requested and the area(s) that would be affected by the variance; 2) Justification for the variance; Alternate mitagative methods or measures to be utilized. R613-004-113. Surety A reclamation cost estimate cannot be calculated until the additional information requested above is provided by the operator. General Review Questions and Comments: 1. The Burke Loadout is referenced in the operators narrative as being included with the Burke Fines and the Burke Pit. These areas being "considered as one", according to the narrative, are supposedly already covered by the exiting reclamation bond. It is unclear whether or not the Burke Stockpile mentioned in page one of the narrative is the same as the Burke Fines? Also, are the Burke Fines and Blackhawk fines stockpile area(s) the same? We suggest that Geneva contact this office, after reviewing this document, to arrange a meeting to discuss any questions you may have regarding these permitting requirements. We have several approved permit applications of similarly sized mining operations on file, that could be used as a guide or reference in assembling a more comprehensive and consolidated mining and reclamation plan for the Iron Mountain mine properties. The Division appreciates Geneva's continued cooperation in keeping us apprised of your mining plans for this area. However, we are concerned that Geneva is presently conducting mining activities in violation of rules R613-003-113 - Mine Enlargement, and R613-004-118.2 - Revisions.

Page 9 Mr. Roy Benson M/021/008 October 24, 1990 We are also concerned that the existing \$81,000 reclamation bond may not be sufficient to reclaim Geneva's current mine disturbances. Consequently, we cannot overemphasize the importance of acting in an expeditious manner in providing a complete and accurate permit application for Geneva's present and proposed mining operations in the Iron Mountain area. Should Geneva fail to act accordingly, the Division will be forced to find Geneva in non-compliance with the Mined Land Reclamation Act and promulgated rules. The Division or Board of Oil, Gas and Mining may issue an Emergency Order requiring immediate suspension of mining activities, or commence adjudicative proceedings against Geneva pursuant to the requirements of Rule R613-005-104 et. seq. We hope you can appreciate the urgency of this matter and look forward to hearing from you in the very near future. Sincerely, Samel P. Bruten D. Wayne Hedberg Permit Supervisor, Minerals Program DWH/jb cc: Lowell Braxton Minerals staff MNM021008.1